

Supporting information

Experimental

Characterization techniques

The structural analysis of FPMI was carried out for a selected sample of approximately 0.35 x 0.30 x 0.30 mm³ using a BRUKER AXS (Kappa APEXII) X-ray diffractometer. Single crystal XRD data were collected on a diffraction system that employs graphite monochromated Mo K α radiation ($\lambda = 0.71073\text{\AA}$). The powder XRD analysis was performed using a Philips X'pert Pro Triple axis X-ray diffractometer using a wavelength of 1.540 \AA with a step size of 0.008 \AA and the samples were examined with Cu K α radiation in 2θ range of 10–50°. FT-IR spectra were recorded using a NICOLET IS5 FT-IR instrument using the KBr pellet technique in the spectral range of 650–4000 cm⁻¹ and FT-Raman spectra were recorded by BRUKER RFS 100/S Instrument. The NMR spectra were recorded on BRUCKER AVIII 400 MHz NMR spectrometer operating at 400.13 MHz for ¹H and 100.61 MHz for ¹³C using standard parameters. The FPMI is dissolved in 0.5 ml of CDCl₃ solvent and TMS (tetramethylsilane) was used as an internal standard. Mass spectrum of FPMI was recorded on a VARIAN SATURN 2000 GC-MS/MS spectrometer using electron impact technique by dissolving about 1 mg of compound in 5 ml of spectral grade methanol. A CARY-5E UV-vis spectrophotometer was used for the UV-vis studies. Thermogravimetry and differential thermal analyses were recorded on NETZSCH STA 449F3 thermal analyzer in nitrogen atmosphere. The sample was scanned in the temperature range 20–500 °C at a rate of 10 °C min⁻¹.

Supplementary Figure captions

Fig S1. FT-IR spectra of FPMI (a) experimental and (b) theoretical

Fig S2. FT-Raman spectra of FPMI.

Fig S3. Tauc plot of FPMI (a) direct and (b) indirect

Fig S4. TG-DTA spectrum of FPMI.

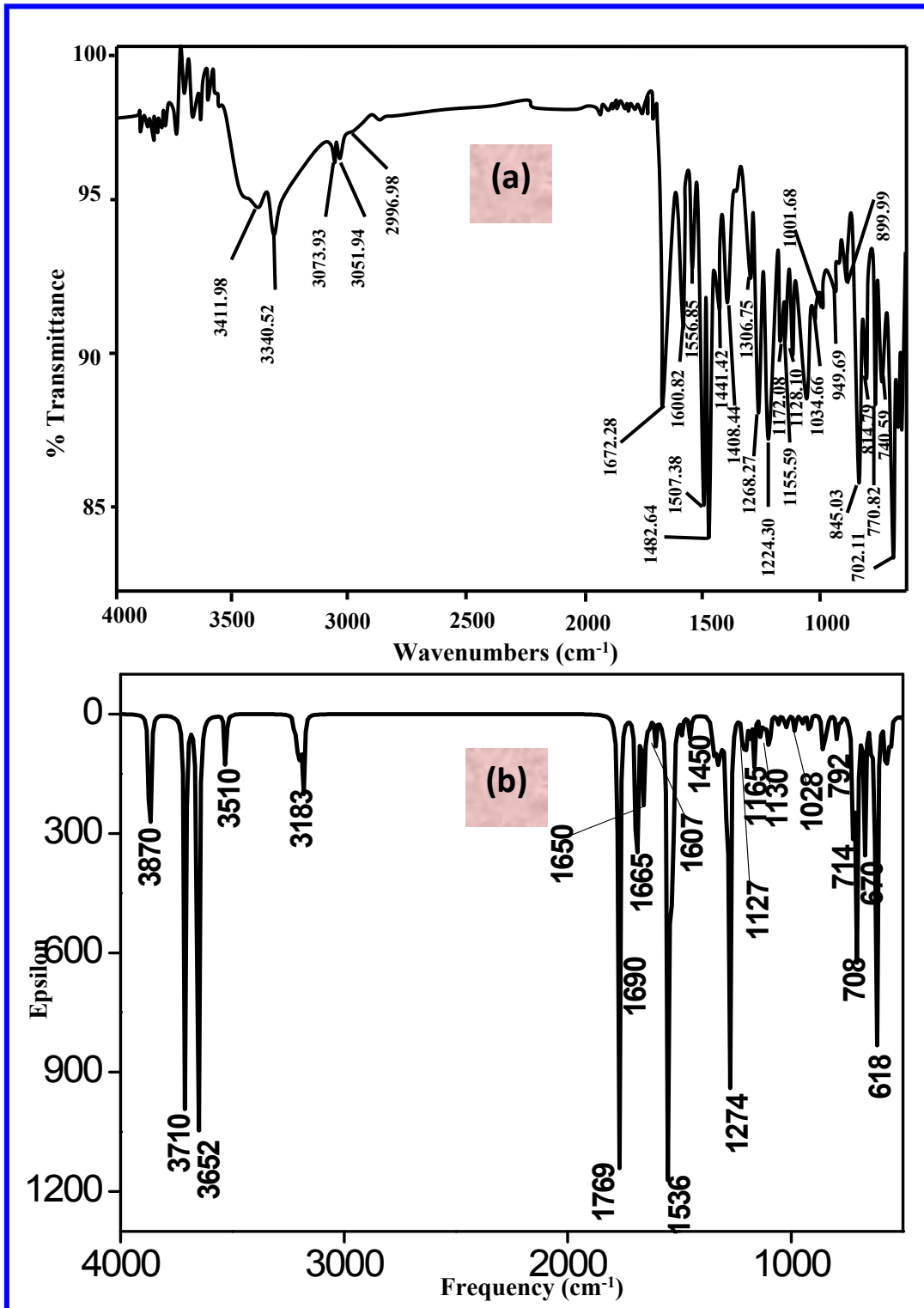


Fig. S1

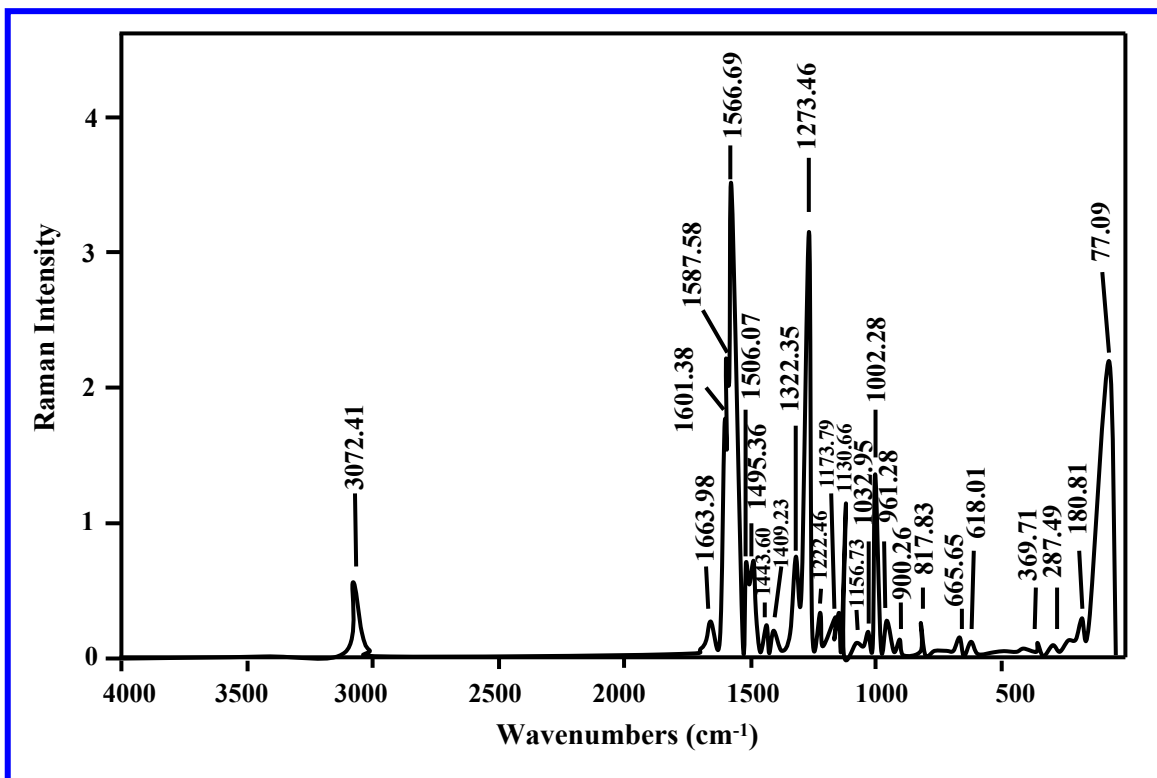


Fig. S2

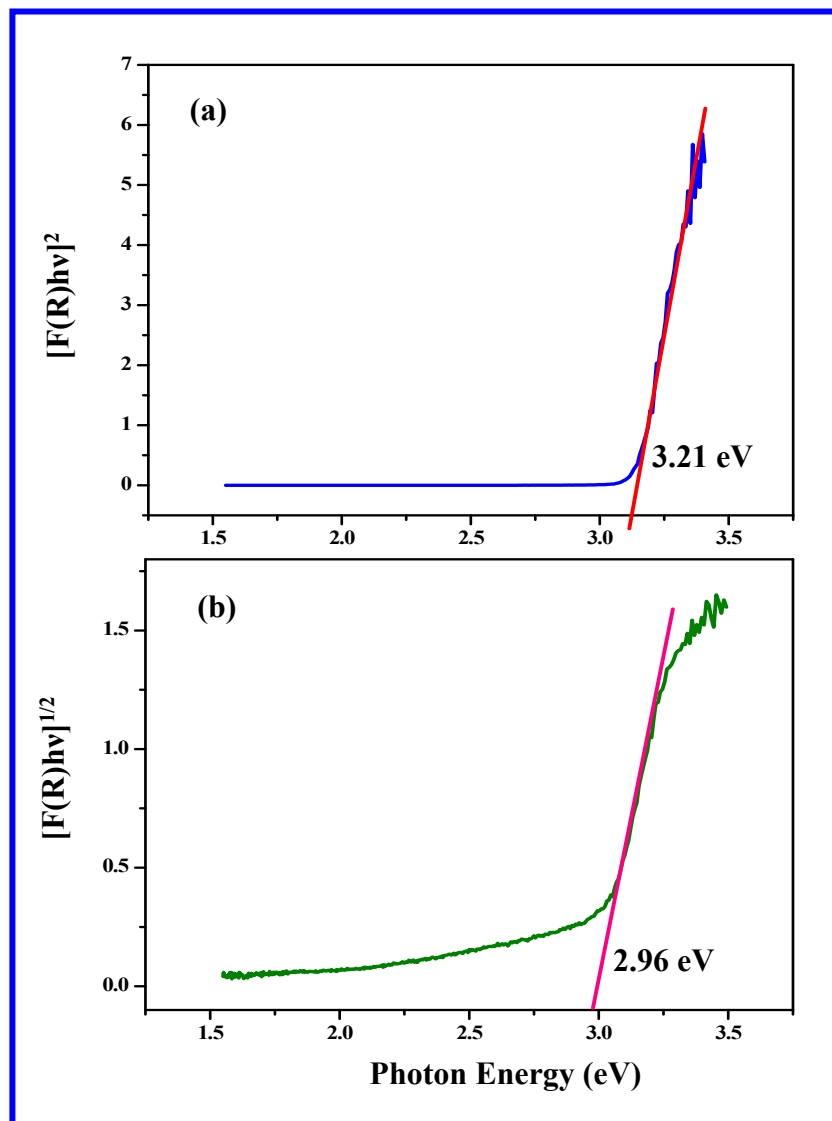


Fig. S3

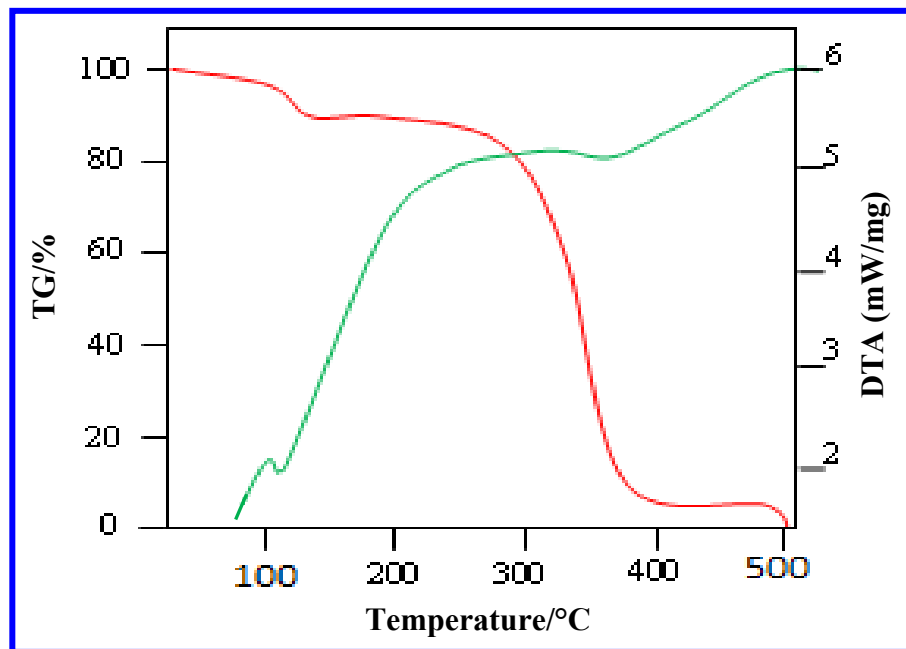


Fig. S4